

WHAT IS CLAIMED IS:

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1 1. A system for managing operational facilities, the system
2 being of the type which utilizes predefined events to carry out managing
3 operations for the facilities, said system comprising:

4 at least one server adapted to receive events from a client and
5 forward said events to a clearinghouse via a communication link;

6 at least one client having a unique login identity and adapted
7 to selectively send events to said server via said communication link; and,

8 a clearinghouse connected to each said server and each said
9 client via said communication link for selectively storing data from each
10 server and each client in a database, and being adapted to selectively
11 authorize predetermined events by each client according to said login
12 identity of each such client, to selectively schedule predetermined events in
13 response to data stored in said database and to monitor the status of all
14 events stored in said database.

1 2. A system as defined in claim 1 wherein each said client
2 has a visual display associated therewith, said server being adapted to
3 access selected data from said clearinghouse and forward data to each client
4 for display.

1 3. A system as defined in claim 1 wherein each said client is
2 preloaded with software means adapted to send and receive events.

1 4. A system as defined in claim 1 wherein one or more of
2 said server, clearinghouse and client includes means for defining various
3 levels of authorization for limiting access to predetermined events.

1 5. A system as defined in claim 1 wherein one or more of
2 said server, clearinghouse and client include predefined templates for
3 selected events.

1 6. A system as defined in claim 1 wherein said predefined
2 events include one or more events selected from the group consisting of:

3 ✓ a notification event;
4 a download tasks event;
5 an upload tasks event;
6 a perform task event;
7 a jobsite setup event;
8 a contact setup event;
9 a vendor setup event;
10 an inspection setup event;
11 a special action setup event;
12 a checklist item setup event;
13 a performance rating method setup event;
14 a performance rating type setup event;
15 an inspection template setup event;
16 a schedule setup event;
17 an inspection processing event;
18 a work request event;
19 a work request processing event;
20 a work order event; and,
21 a work order processing event.

1 7. A system as defined in claim 6 wherein said clearinghouse
2 creates a notification event responsive to preselected ones of said
3 predetermined events not having been completed as prescribed and
4 therefore overdue.

1 14. A system as defined in claim 13 wherein each said client
2 is adapted to request a download-tasks event to said clearinghouse after
3 authorized communication is established.

1 15. A system as defined in claim 14 wherein during said
2 download-tasks event said authorized/client is adapted to:

3 download task-list data from said clearinghouse;
4 determine whether said task-list data is valid; and,
5 determine whether communication with said server is
6 disconnected when said task-list data is not valid.

1 16. A system as defined in claim 15 wherein during one of a
2 download-tasks event or an upload tasks event said authorized client is
3 adapted to make an entry in an exception log when communication with at
4 least one server is disconnected.

1 17. A system as defined in claim 16 wherein one of said
2 download-tasks event or said upload-tasks event said authorized client is
3 adapted to:

4 check communication with said server for a predetermined
5 maximum retry count when communication with said server is
6 disconnected; and,

7 make an entry in an exception log once said predetermined
8 maximum retry count has been tried.

1 18. A system as defined in claim 16 wherein during said
2 download-tasks event said authorized client is adapted to download said
3 task-list data until all tasks stored in said database for said login identity
4 have been downloaded from said clearinghouse.

1 19. A system as defined in claim 16 wherein during said
2 download-tasks event said authorized client is adapted to upload said task-
3 list data until all tasks stored in said authorized client have been uploaded
4 onto said database.

1 20. A system as defined in claim 6 wherein during said
2 perform-task event said clearinghouse is adapted to forward task-list data
3 for said login identity to said server.

21. A system as defined in claim 20 wherein during said
perform-task event said server is adapted to send said task-list data to said
authorized client.

1 22. A system as defined in claim 21 wherein during said
2 perform-task event said authorized client is adapted to:
3 display a list of available tasks for selection from task-list
4 data stored in said authorized client; and,
5 select an available task from said list for completion of said
6 task.

23. A system as defined in claim 22 wherein during said perform-task event said clearinghouse is adapted to forward checklist-item data for said task to said server.

24. A system as defined in claim 23 wherein during said perform-task event said server is adapted to send said checklist-item data to said authorized client.

25. A system as defined in claim 24 wherein during said
perform-task event said authorized client is adapted to display a list of the

3 checklist items from checklist-item data for completing said checklist
4 items.

1 26. A system as defined in claim 25 wherein during said
2 perform-task event said authorized client is adapted to respond, skip, or
3 stop each checklist item from said checklist-item data until all checklist
4 items have been completed.

1 27. A system as defined in claim 25 wherein during said
2 perform-task event said authorized client is adapted to:

3 exit display of said checklist item data when said authorized
4 client elects to stop said first checklist item;

5 store response data for said first checklist item when said
6 authorized client elects to respond to said first checklist item; and,

7 respond, skip, or stop a next checklist item from said
8 checklist-item data when said authorized client elects to skip said first
9 checklist item.

1 28. A system as defined in claim 6 wherein during said job
2 site-setup event said authorized client is adapted to execute:

3 a contact-setup event that allows said authorized client to
4 input and edit contact data for said job site data;

5 a vendor-setup event that allows said authorized client to
6 input and edit vendor data for said job site data;

7 an inspection-setup event that allows said authorized client to
8 input and edit inspection data for said job site data; and,

9 a special-actions-setup event that allows said authorized client
10 to input and edit special-action data for said job site data.

29. A system as defined in claim 28 wherein said inspection-setup event further includes a checklist-item-setup event that allows said authorized client to input and edit checklist-item data for said job site data.

30. A system as defined in claim 6 wherein said performance-rating-type-setup event allows said authorized server to display an option menu for a yes/no type, a multiple options type, and numerical type of performance rating to said authorized client for selection.

31. A system as defined in claim 30 wherein said client carrying out said performance-rating-type-setup event saves the performance rating type data including the selected type onto said database.

32. A system as defined in claim 31 wherein said client can define the tolerance level to create a special-action event for performance rating type data stored in said database.

33. A system as defined in claim 6 wherein an authorized client can input and edit inspection-templates data for a specific job site data in said database for said inspection-templates-setup event.

34. A system as defined in claim 33 wherein said inspection-templates data includes inspection steps according to a default checklist-item data or a user defined checklist-item data stored in said database.

35. A system as defined in claim 6 wherein said clearinghouse is adapted to respond to inspection data sent from an authorized client during an inspection-processing event and determine whether said inspection data from said authorized client are valid.

36. A system as defined in claim 35 wherein during said inspection-processing event said clearinghouse is adapted to make an entry in an exception log when said inspection data is not valid.

37. A system as defined in claim 35 wherein during said inspection-processing event said clearinghouse is adapted to:

save said inspection data in said database when said inspection data is valid; and,

determine whether said inspection data is within predefined tolerances according to performance-rating-method data stored in said database.

38. A system as defined in claim 37 wherein during said inspection-processing event said clearinghouse is adapted to create a notification event for said server to send a message of said inspection data being within predefined tolerances to a contact person.

39. A system as defined in claim 38 wherein during said inspection-processing event said clearinghouse is to adapted to:

—determine whether a special-action event is required when said inspection data is not within predefined tolerances according to performance-rating-method data stored in said database;

create a notification event for said server to send a message of said inspection data not being within predefined tolerances to a contact person when said special-action event is not required; and,

create a work-request event or a work-order event according to special action data stored in said database when said special-action event is required.

40. A system as defined in claim 39 wherein during said work-request event said server is adapted to:

display a list of job sites approved to said authorized client from said clearinghouse to said authorized client for selection when said authorized client requests to add new data; and,

display an existing work-request data of a specific job site data from said clearinghouse to said authorized client for revision when said authorized client requests to edit existing data.

41. A system as defined in claim 40 wherein during said work-request event said clearinghouse is adapted to create a notification event for said at least one server to send said revised existing work-request data to a contact person for approval when said list of available job sites to said authorized client is empty.

42. A system as defined in claim 40 wherein during said work-request event said clearinghouse is adapted to create a notification event for said server to send a message from said authorized client to a contact person when said list of job sites available to said authorized client is empty.

43. A system as defined in claim 41 wherein during said work-request event said clearinghouse is adapted to:

provide a predetermined authorized client according to contact data stored in said database for said revised work-request data; and, save said revised work-request data including said predetermined authorized client in said database.

44. A system as defined in claim 43 wherein during said work-request event/said clearinghouse is adapted to create a notification

3 event for said at least one server to send said saved work-request data to
4 said authorized client.

1 45. A system as defined in claim 6 wherein during said work-
2 request-processing event said authorized client is adapted to accept or reject
3 a selected open work-request data from said list.

1 46. A system as defined in claim 45 wherein during said
2 work-request-processing event said authorized client is adapted to enter an
3 approval code when said authorized client accepts a selected open work-
4 request data from said list.

1 47. A system as defined in claim 46 wherein during said
2 work-request-processing event said server is adapted to save said work-
3 request data including said approval code in said database.

1 48. A system as defined in claim 47 wherein during said
2 work-request-processing event said clearinghouse is adapted to create a
3 work-order event for said work-request data having said approval code.

1 49. A system as defined in claim 45 wherein during said
2 work-request-processing event said authorized client is adapted to enter an
3 explanation for said selected work-request data when said authorized client
4 rejects a selected open work-request data stored in said database.

1 50. A system as defined in claim 49 wherein during said
2 work-request-processing event said authorized client is adapted to request a
3 new work-request event of another job site for approval from an authorized
4 client according to contact data stored in said database when said
5 authorized client selects to request a new work-request event.

51. A system as defined in claim 50 wherein during said
work-request-processing event said server is adapted to save said new
work-request event in said database.

52. A system as defined in claim 51 wherein during said work-request-processing event said clearinghouse is adapted to create a notification event for server to send a message of said new work-request event to said authorized client for approval.

1 53. A system as defined in claim 52 wherein during said
2 work-request event said authorized client is adapted to display:

3 a list of job sites that are approved for selection when said
4 authorized client requests to add new data;

5 existing work-request data of a specific job site stored in said
6 database for revision when said authorized client requests to edit existing
7 data; and,

8 new work-order data for revision when said authorized client
9 selects a job site from said list.

1 54. A system as defined in claim 53 wherein during said
2 work-request event said server is adapted to:

3 notify said authorized client that no job sites are available
4 when said list of approved job sites is empty; and,

5 determines whether said authorized client requested to create
6 a work-request event.

1 55/ A system as defined in claim 53 wherein during said
2 work-request event said authorized client is adapted to provide a predefined

3 recipient according to job site data stored in said database after said
4 authorized client finishes revising said work-order data.

1 56. A system as defined in claim 55 wherein during said
2 work-order event said clearinghouse is adapted to create a notification
3 event for said server to send said work-order data to said predefined
4 recipient.

1 57. A system as defined in claim 6 wherein during said work-
2 order-processing event allows said server is adapted to display a list of all
3 open work-order data from said clearinghouse available to said authorized
4 client for completion when said authorized client does not identify a
5 specific job site.

1 58. A system as defined in claim 57 during wherein said
2 work-order-processing event said server is adapted to:

3 display an existing open work-order data of a specific job site
4 for completion when said authorized client identifies a specific job site.

5 display open work-order data for completion for a specific job
6 site from said list for completion when said authorized client selects a
7 specific job site from said list.

1 59. A system as defined in claim 58 wherein during said
2 work-order-processing event said authorized client is adapted to revise said
3 open work-order data indicating completion of said work-order data.

1 60. A system as defined in claim 59 wherein during said
2 work-order-processing event said authorized client is adapted to send said
3 revised work-order data to said clearinghouse upon completion.

61. A system as defined in claim 60 wherein during said work-order-processing event said server is adapted to:

receive said revised work-order data indicating completion from said authorized client; and,

check whether said revised work-order data are valid.

62. A system/as defined in claim 61 wherein during said work-order-processing event said authorized client is adapted to save said revised work-order data in said database when said work-order data is valid.

63. A system as defined in claim 62 wherein during said work-order processing event said clearinghouse is adapted to create a notification event for said server to send a message of said revised work-order data indicating completion to a contact person.

64. A system as defined in claim 63 wherein during said work-order-processing event said clearinghouse is adapted to make an entry in an exception log when said work-order data is not valid.

65. A system as defined in claim 61 wherein during said work-order-processing event said authorized client is adapted to save said revised work-order data onto said database when said work-order data are valid.

~~67.~~ A system as defined in claim 1 wherein said clearinghouse is adapted to schedule events in response to being triggered by a timer.

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68. A method for managing operational facilities using
predefined events to carry out managing operations for the facilities,
wherein the events are exchanged between at least one client having a
unique login identity and at least one server connected to a clearinghouse
over a communication link, the method comprising the steps of:
selectively sending, by the client, events to at least one server
via communication link;
forwarding, by the server, said events to a clearinghouse via
the communication link; and,
authorizing, by the clearinghouse, said events from each
client according to said login identity of each such client;
storing, by the clearinghouse, said events in a database;
selectively scheduling, by the clearinghouse, predetermined
events in response to said events stored in said database, and
monitoring, by the clearinghouse, the status of all events
stored in said database.

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69. The method according to 68 further comprising the
step of accessing, by the server, selected data from the clearinghouse to
forward to client for display.

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70. The method according to 68, wherein said authorizing
step further comprising the step of defining, by the clearinghouse, various
levels of authorization for access to said events according to said login
identity of the client.

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